

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1-3. (Canceled)

4. (Currently Amended) The method of claim [3] 31, wherein executing the diagnostics relative to the sensors comprises:

- confirming a room temperature data value;
- validating a remote set point value;
- confirming a room relative humidity value.

5. (original) The method of claim 4, wherein executing the diagnostics relative to the cooling process comprises:

- confirming that a fan is running;
- validating the cooling process; and
- validating cooling equipment of the cooling process.

6. (original) The method of claim 5, wherein executing the diagnostics relative to the heating process comprises confirming activation of a heating stage.

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

7. (original) The method of claim 5, wherein connecting the personal digital assistant to the thermostat is performed with a wireless medium.

8. (original) An apparatus for diagnosis of a thermostat system, comprising:

a personal digital assistant (PDA) connected to a thermostat of the thermostat system; and
a program in a memory for diagnosis of the thermostat system;

wherein:

the PDA performs the following tasks:
uploading a thermostat configuration;
disabling delays of functions in the thermostat system;
overriding sensor inputs and set points; and
testing sensors, a cooling process and a heating process.

9. (original) The apparatus of claim 8, wherein testing

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

sensors comprises:

confirmation of temperature values as indicated by the
thermostat; and
validation of set points.

10. (original) The apparatus of claim 9, wherein the
testing of sensors further comprises validation of relative
humidity values as indicated by the thermostat.

11. (original) The apparatus of claim 10, wherein the
testing of the cooling process comprises:

initiating a cooling test;
confirming a running of a cooling fan;
collecting data on time intervals, cooling coil
temperatures and discharge air temperatures; and
determining from the data whether the cooling process
is satisfactory or not.

12. (original) The apparatus of claim 11, wherein the
testing of the heating process comprises:

initiating a heating test;

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

selecting a type of heating;
confirming a running of the fan if needed for a
selected type of heating;
activating a heating stage; and
validating an output of heat from the heating stage.

13. (original) The apparatus of claim 12, wherein the PDA is connected to the thermostat via an infrared connection.

14. (original) A method for testing a thermostat system via a personal digital assistant (PDA) comprising:
uploading configuration information about the
thermostat system to the PDA;
turning off controller delays;
overriding sensor inputs and set point;
testing sensors, fan, and cooling and heating
equipment; and;
reporting the working status of the sensors, fan, and
cooling and heating equipment.

15. (original) The method of claim 14, wherein the

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

testing of the sensors comprises:

- validating indications of temperature sensors in various locations;
- validating values of temperature set points for a sample of set point settings;
- validating temperature set points for at least one setting; and
- validating indications of at least one humidity sensor.

16. (original) The method of claim 15, wherein the testing of the fan comprises:

- turning on the fan via the PDA;
- verifying that the fan is on;
- turning off the fan via the PDA; and
- verifying that the fan is off.

17. (original) The method of claim 16, wherein the testing of the cooling equipment comprises:

- turning on the fan via the PDA;
- confirming operation of the fan;

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

turning on the cooling equipment via the PDA;
collecting time and temperature data about the cooling
equipment; and
determining whether operation of the cooling equipment
is adequate.

18. (original) The method of claim 17, wherein the
testing of the heating equipment comprises:

making a determination whether the fan is to be
operating or not, and effecting a fan operational
status according to the determination;
turning on the heating equipment;
collecting time and temperature data about the heating
equipment; and
determining whether operation of the heating equipment
is adequate.

19. (original) The method of claim 18, further comprising
displaying a report of the testing of the sensors, set
points, fan, cooling equipment and heating equipment.

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

20. (original) The method of claim 19, further comprising restoring original operating parameters to the thermostat system.

21. (original) The method of claim 20, wherein the PDA is connected to the thermostat system via a wireless medium.

22-30. (Canceled)

31. (New) A method for verification of operation of an air management controller system having a thermostat, comprising:

connecting a personal digital assistant to the thermostat;

uploading configuration information from the

thermostat to the personal digital assistant;

executing diagnostics relative to sensors, fan

process, cooling process and heating process,

with the personal digital assistant;

reporting results of the diagnostics as OK, untested

or failed for the sensor, the fan process, the

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

cooling process and the heating process;
turning off normal controller delays; and
temporarily overriding sensor inputs and set points;
and
wherein the turning off the normal controller delays
and temporarily overriding sensor inputs and set
points are performed prior to executing the
diagnostics.

32. (New) A method for verification of operation of an air
management controller system having a thermostat,
comprising:

connecting a personal digital assistant to the
thermostat;
uploading configuration information from the
thermostat to the personal digital assistant;
executing diagnostics relative to sensors, fan
process, cooling process and/or heating process,
with the personal digital assistant;
reporting results of the diagnostics as OK, untested
or failed for the sensor, the fan process, the

Application Serial No. 10/643,430
Amendment dated July 16, 2004
Reply to Office Action dated April 16, 2004

cooling process and the heating process;
turning off normal controller delays; and
temporarily overriding sensor inputs and set points;
and
wherein the turning off the normal controller delays
and temporarily overriding sensor inputs and set
points are performed prior to executing the
diagnostics.